CLAIM

1. A method for determining the distance of a transceiver located within a lumen from the center of the lumen and for determining the radius of the lumen, the lumen cross-section being substantially circular at the transceiver location, the method applied on data received from a transceiver placed at a position within the lumen that is distance (r) from the center and distance (a) from the lumen wall, transmitting a signal of known velocity (v) that canbe correlated with the time of flight and receiving a first signal and a second signal that are reflections of the transmitted signal, timing the time differences between the transmission of the transmitted signal and reception of the first (t1) and second (t2) reflection signals, the method comprising:

Calculating the distance of the transceiver from the center of the lumen = $(t1 - t2)v/4$;

Calculating the radius of the lumen = $(t1 + t2)v/4$.